- L17 ANSWER 1 OF 7 USPATFULL on STN
- System for dispensing pharmaceutical active compounds TΤ
- A system for dispensing a clinically effective dose of an inhalable, AB pharmaceutically active compound, which system includes a dry powder inhaler device containing a powder containing the pharmaceutically active compound, wherein
 - (a) of the powder particles dispensed by the inhaler device (the "metered DPI dose"), at least 40% are less than about 10 microns in diameter at the point the particles exit the inhaler,
 - (b) the metered DPI dose is sufficient to produce a clinically effective result in a patient; and
 - (c) the amount of the compound in the metered DPI dose is not more than 70% of the minimal amount of the compound which, when dispensed in a pressurized metered dose inhaler, produces an equivalent clinically effective result in the same patient.

ACCESSION NUMBER: 2002:62599 USPATFULL

TITLE: System for dispensing pharmaceutical active compounds INVENTOR(S): Andersson, Jan, S{overscore (o)}dra Sandby, SWEDEN

> Jagfeldt, Hans, Lund, SWEDEN Trofast, Eva, Lund, SWEDEN

Wetterlin, Kjell, S{overscore (o)}dra Sandby, SWEDEN

AB Astra, Sodertalje, SWEDEN (non-U.S. corporation) PATENT ASSIGNEE(S):

> NUMBER KIND DATE ______

US 6360743 B1 20020326 US 1999-309039 19990510 (9) PATENT INFORMATION: APPLICATION INFO.: Continuation of Ser. No. US 1997-866749, filed on 30 RELATED APPLN. INFO.:

May 1997, now patented, Pat. No. US 5934273

Continuation of Ser. No. US 1996-654006, filed on 29

May 1996, now patented, Pat. No. US 5642728

Continuation of Ser. No. US 1993-165402, filed on 10

Dec 1993, now abandoned

NUMBER SE 1992-3743 19921211

PRIORITY INFORMATION: DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Weiss, John G. ASSISTANT EXAMINER: Srivastava, V.

LEGAL REPRESENTATIVE: Fish & Richardson P.C.

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 457

L17 ANSWER 4 OF 7 USPATFULL on STN

TISystem for dispensing pharmaceutically active compounds

AΒ A system for dispensing a clinically effective dose of an inhalable, pharmaceutically active compound, which system includes a dry powder inhaler device containing a powder containing the pharmaceutically active compound, wherein

(a) of the powder particles dispensed by the inhaler device (the "metered DPI dose"), at least 40% are less than about 10 microns in diameter at the point the particles exit the inhaler,

- (b) the metered DPI dose is sufficient to produce a clinically effective result in a patient; and
- (c) the amount of the compound in the metered DPI dose is not more than 70% of the minimal amount of the compound which, when dispensed in a pressurized metered dose inhaler, produces an equivalent clinically effective result in the same patient.

ACCESSION NUMBER: 2001:96329 USPATFULL

TITLE: System for dispensing pharmaceutically active compounds

INVENTOR(S): Andersson, Jan, Sodra Sandby, Sweden

Jagfaldt, Hans, Lund, Sweden Trofast, Eva, Lund, Sweden

Wetterlin, Kjell, Sodra Sandby, Sweden

PATENT ASSIGNEE(S): AB Astra, Sodertalje, Sweden (non-U.S. corporation)

PATENT INFORMATION: US 6250300 B1 20010626 APPLICATION INFO.: US 1999-418342 19991014 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-309039, filed on 10 May

1999 Continuation of Ser. No. US 1997-866749, filed on

30 May 1997, now patented, Pat. No. US 5934273

Continuation of Ser. No. US 1996-654006, filed on 29

May 1996, now patented, Pat. No. US 5642728

Continuation of Ser. No. US 1993-165402, filed on 10

Dec 1993, now abandoned

NUMBER DATE

PRIORITY INFORMATION: SE 1992-3743 19921211

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Dawson, Glenn K. ASSISTANT EXAMINER: Srivastava, V.

LEGAL REPRESENTATIVE: Fish & Richardson P.C.

NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 464

L17 ANSWER 5 OF 7 USPATFULL on STN

TI System for dispensing pharmaceutically active compounds

AB A system for dispensing a clinically effective dose of an inhalable, pharmaceutically active compound, which system includes a dry powder inhaler device containing a powder containing the pharmaceutically active compound, wherein

- (a) of the powder particles dispensed by the inhaler device (the "metered DPI dose"), at least 40% are less than about 10 microns in diameter at the point the particles exit the inhaler,
- (b) the metered DPI dose is sufficient to produce a clinically effective result in a patient; and
- (c) the amount of the compound in the metered DPI dose is not more than 70% of the minimal amount of the compound which, when dispensed in a pressurized metered dose inhaler, produces an equivalent clinically effective result in the same patient.

ACCESSION NUMBER: 1999:91006 USPATFULL

TITLE: System for dispensing pharmaceutically active compounds

Andersson, Jan, Sodra Sandby, Sweden INVENTOR(S):

> Jagfeldt, Hans, Lund, Sweden Trofast, Eva, Lund, Sweden

Wetterlin, Kjell, Sodra Sandby, Sweden

AB Astra, Sodertalje, Sweden (non-U.S. corporation) PATENT ASSIGNEE(S):

NUMBER KIND DATE -----PATENT INFORMATION: US 5934273 19990810 US 1997-866749 19970530 (8) APPLICATION INFO.:

Continuation of Ser. No. US 1996-654006, filed on 29 RELATED APPLN. INFO.:

> May 1996, now patented, Pat. No. US 5642728 which is a continuation of Ser. No. US 1993-165402, filed on 10

Dec 1993, now abandoned

NUMBER DATE _____

SE 1992-3743 19921211 PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Weiss, John G. ASSISTANT EXAMINER: Srivastava, V.

ASSISIANT EXAMINER.

LEGAL REPRESENTATIVE: Fish & Richardson P.C.

NUMBER OF CLAIMS: 4

EXEMPLARY CLAIM: 1

4 Drawing Figure(s); 2 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT:

L17 ANSWER 7 OF 7 USPATFULL on STN

ΤI System for dispensing pharmaceutically active compounds

A method is provided for dispensing a clinically effective dose of an AΒ inhalable, pharmaceutically active compound. The method includes providing a dry powder inhaler containing a powder including the pharmaceutically active compound, and administering to a patient a dose of the compound that is less than 70% of the dose that would be necessary to obtain a physiologically equivalent result were the compound administered by a pressurized metered dose inhaler. The pharmaceutically active compound is in the form of primary particles at least 80% of which have a particle size of less than 10

microns, and the primary particles are provided as agglomerates which are deagglomerated during inhalation so that at least 40% of the dose

administered is in the form of primary particles. ACCESSION NUMBER: 97:55502 USPATFULL

TITLE: System for dispensing pharmaceutically active compounds

Andersson, Jan, Sodra Sandby, Sweden INVENTOR(S):

Jagfeldt, Hans, Lund, Sweden Trofast, Eva, Lund, Sweden

Wetterlin, Kjell, Sodra Sandby, Sweden

PATENT ASSIGNEE(S): AB Astra, Sodertalje, Sweden (non-U.S. corporation)

NUMBER KIND DATE ______ US 5642728 19970701 US 1996-654006 19960529 (8) APPLICATION INFO.:
RELATED APPLY

Continuation of Ser. No. US 1993-165402, filed on 10 RELATED APPLN. INFO.:

Dec 1993, now abandoned

NUMBER DATE PRIORITY INFORMATION: SE 1992-3743 19921211

DOCUMENT TYPE: Utility

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FILE SEGMENT:
                        Granted
PRIMARY EXAMINER: Millin, Vincent ASSISTANT EXAMINER: Raciti, Eric P.
LEGAL REPRESENTATIVE: Fish & Richardson P.C.
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
                        1
NUMBER OF DRAWINGS:
                       4 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT:
                        448
=> d his
     (FILE 'HOME' ENTERED AT 20:59:04 ON 17 FEB 2008)
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         145643 S (ADRENALINE OR EPINEPHRINE OR EPIFRIN OR EPITRATE OR LYOPHRIN
T.1
L2
           4977 S L1 (S) (DPI OR (DRY(W)POWDER(W)INHALER) OR INHALA? OR RESPIRA
L3
             74 S L2 (S) ((DRY(W)POWDER) OR PARTICULATE OR PARTICLE)
L4
              8 S L3 (S) (TARTRATE OR BITARTRATE)
L5
              7 DUP REM L4 (1 DUPLICATE REMOVED)
L6
              3 S L5 NOT PD>20020628
L7
              9 S L3 AND (TARTRATE OR BITARTRATE)
L8
              8 DUP REM L7 (1 DUPLICATE REMOVED)
L9
              4 S L8 NOT PD>20020628
L10
              1 S L9 NOT L6
            486 S L2 AND ((DRY(W)POWDER) OR PARTICULATE OR PARTICLE)
L11
           268 S L11 AND (ADRENALINE OR EPINEPHRINE (P) (TARTRATE OR BITATRATE
L12
L13
            48 S L12 AND LEUCINE
L14
            47 DUP REM L13 (1 DUPLICATE REMOVED)
L15
              7 S L14 NOT PD>20020628
L16
              7 S L15 NOT L9
L17
              7 S L16 NOT L6
=> d que L1
         145643 SEA (ADRENALINE OR EPINEPHRINE OR EPIFRIN OR EPITRATE OR
L1
                LYOPHRIN OR MICRONEFRIN OR MICRONEPHRINE OR VAPONEFRIN OR
                (51-43-4/RN))
=> d que L2
         145643 SEA (ADRENALINE OR EPINEPHRINE OR EPIFRIN OR EPITRATE OR
L1
                LYOPHRIN OR MICRONEFRIN OR MICRONEPHRINE OR VAPONEFRIN OR
                (51-43-4/RN)
L2
           4977 SEA L1 (S) (DPI OR (DRY(W) POWDER(W) INHALER) OR INHALA? OR
                RESPIRA?)
=> d que L12
         145643 SEA (ADRENALINE OR EPINEPHRINE OR EPIFRIN OR EPITRATE OR
T.1
                LYOPHRIN OR MICRONEFRIN OR MICRONEPHRINE OR VAPONEFRIN OR
                (51-43-4/RN)
L2
           4977 SEA L1 (S) (DPI OR (DRY(W) POWDER(W) INHALER) OR INHALA? OR
                RESPIRA?)
            486 SEA L2 AND ((DRY(W) POWDER) OR PARTICULATE OR PARTICLE)
T.11
L12
            268 SEA L11 AND (ADRENALINE OR EPINEPHRINE (P) (TARTRATE OR
```

BITATRATE))